

Tangier Town Plan

Prepared by:

Tangier Planning Commission

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I. INTRODUCTION

THE COMPREHENSIVE PLAN

A comprehensive plan is an official public document adopted by a local government to be used as a guide for making policy decisions about the physical development of a community, including providing public services for community residents. A comprehensive plan is general in nature and is used as a basis for the zoning ordinance.

The Virginia General Assembly, recognizing the need and value for local planning within each area of the Commonwealth, adopted Section 15.1-446.1 of the Code of Virginia (1950) as amended on July 1, 1980, which requires that each city, county or town develop and adopt a comprehensive plan. Section 15.1-446.1 states, "The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted, and harmonious development of the territory which will, in accordance with present and probable future needs and resources best promote the health, safety, morals, order, convenience, prosperity, and general welfare of the inhabitants."

In addition to the above mandate, the Virginia General Assembly, recognizing the economic and social importance of ensuring the long term viability of state waters and in particular the Chesapeake Bay and its tributaries, enacted the Chesapeake Bay Preservation Act of 1988 (Act)(§ 10.1-2100, et seq., of the Code of Virginia). The Act is a cooperative effort between the state and local governments with a water quality improvement and protection focus.

Section 10.1-2109.B of the Act states that "Counties, cities, and towns in Tidewater Virginia shall incorporate protection of the quality of state waters into each locality's comprehensive plan consistent with the provisions of this chapter." The Town of Tangier recognizes the importance of maintaining the integrity of state waters and the Chesapeake Bay to the citizens of the Commonwealth and of Tangier. The waters of the Chesapeake Bay have been degraded significantly by many sources of pollution, including nonpoint source pollution from land uses and development. Certain lands that are next to the shoreline have intrinsic water quality value due to the ecological and biological processes they perform. Other land areas have severe development constraints as a result of flooding, erosion, and soil limitations. With proper management, these lands offer significant environmental benefits by providing water quality maintenance and pollution control, as well as flood and shoreline erosion control.

To achieve these ends, the Town Council and Planning Commission of the Town of Tangier have developed the following Comprehensive Plan. Once the plan is adopted by the Town Council, the Plan controls the general location, character and extent of each feature shown on the plan. Before any public area, facility or use can be constructed or established, the Planning Commission must approve it as being substantially in accord with the adopted Plan. The Commission forwards its recommendations on such proposals to the Town Council. Once the Plan is adopted, it should be used as the basis for guiding and regulating land use and physical development.

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II. EXISTING CONDITIONS

COMMUNITY PROFILE

The Town of Tangier encompasses nearly all of Tangier Island, which is located in the Chesapeake Bay, 12 miles from the mainland (see Figure 1). The island is about five miles long and one and a half miles wide, with a land area of approximately 500 acres and a population of 659. The island is 80% marsh, wetlands and water. Although geographically separated from the mainland, the Town of Tangier is part of Accomack County in the Eastern Shore of Virginia.

History of the Area

Tangier Island, settled nearly three centuries ago by folk from the southwest of England, has a colorful history. Captain John Smith "discovered" the island in 1608, though Indians like the Pocomoke had been fishing it for hundreds of years. There is some disagreement among historians as to whether Captain Smith named Tangier after the beaches of Tangiers in Morocco or whether the name is of unknown origin and not used until approximately 100 years later.

In the mid-1600's Ambrose White purchased the island from Indians for two English overcoats. About 20 years later he sold the island to Charles Scarborough and John West. The first permanent settlement occurred in 1686, when John Crockett arrived with his sons and their families. During the war of 1812, the island was occupied by 14,000 British troops, who were between attacks on Washington and Baltimore. The residents were virtually prisoners until the British departed in 1815, and life resumed on Tangier with farming as the primary occupation.

During the early history of Tangier, agriculture and stock raising were the chief occupations of the residents. It was not until the advent of the railroad in the latter part of the 1900's that the market for seafood boomed. Just after the Civil War, in 1866, a cholera epidemic broke out. The island was evacuated and all livestock were destroyed. The quarantine lasted over a year, and when it was over only half of the former population returned. At about the same time, a steamboat line and rail service became accessible, opening up northern markets for seafood.

The Town was incorporated on May 22, 1915, and is now a part of Accomack County magisterial district #2, the Atlantic District. Today residents of Tangier continue to enjoy a close-knit community. Tourism plays an increasingly larger role in the local economy, although many residents still make their living on the water. Seafood harvests have declined since the 1920's, due in part to the health of the Chesapeake Bay. It is hoped that current efforts to restore the Bay will be successful, ensuring the continuation of seafood harvesting as a mainstay of Tangier's economy.

Population Characteristics

Tangier has experienced a steady decline in population since 1960. Table 1 shows that between 1960 and 1990, the Town population fell 20%, while the population of Accomack County increased by 4%.

TABLE 1
Population Change
1960 - 1990

<u>ACCOMACK COUNTY</u>			<u>TANGIER</u>	
<u>Year</u>	<u>Population</u>	<u>% Change</u>	<u>Population</u>	<u>% Change</u>
1960	30,635	--	876	--
1970	29,004	- 5%	814	- 7%
1980	31,268	8%	766	- 6%
1990	31,703	1%	659	- 14%

The population of Tangier is slightly younger than that of Accomack County, as shown in Table 2. Tangier has a smaller percentage of children and considerably more older adults, although the median age on Tangier is the same as that of the County. Between 1980 and 1990, the percentage of children on Tangier dropped from 27% to 23%, and the percentage of adults aged 65 and over increased from 12% to 14%. This suggests the outmigration of young people, fewer births, and the aging of the adult population. Tangier has a very different racial composition than that of Accomack County. The population of Tangier is made up of nearly 100% white residents, while the County population includes 65% white residents and 35% black residents.

TABLE 2
Population Characteristics
1980 - 1990

	<u>1980</u>		<u>1990</u>	
	<u>Accomack</u>	<u>Tangier</u>	<u>Accomack</u>	<u>Tangier</u>
Age				
0-17	8,151 (28%)	210 (27%)	7,521 (24%)	152 (23%)
18-64	17,907 (55%)	466 (60%)	18,331 (58%)	411 (62%)
65 +	5,210 (17%)	95 (12%)	5,851 (19%)	94 (14%)
Median Age	35	32	37	37
Race				
White	19,753 (63%)	771 (100%)	20,499 (65%)	657 (99.7%)
Non-white	11,515 (37%)	0	11,204 (35%)	2 (.3%)

Sources: 1980 U.S. Census STF-1A; 1990 U.S. Census of Population and Housing.

NATURAL RESOURCES

To insure that future development on Tangier is compatible with the natural environment, it is necessary to understand the natural features which exist on the island. A large portion of the land area of Tangier consists of marshes. The shoreline is characterized by salt marshes with occasional narrow, sandy beaches.

Climate

Tangier experiences mild winters and warm, humid summers due to its location in the Chesapeake Bay. The temperature averages 39 degrees in January and 78 degrees in July. Average annual rainfall is 43 inches. Extremely cold winters, which sometimes freeze portions of the Chesapeake Bay, create special problems for residents of Tangier, who are dependent on boat transportation and on commercial fishing for a living.

From April through August, prevailing winds blow from the south to southwest between 10 to 15 miles per hour. Prevailing winds from September to March are northerly with those exceeding 25 miles per hour coming from the northwest to northeast direction. Northeast winds have little impact on Tangier Island due to protective shoals in Pocomoke and Tangier Sounds. Winds ranging from the southerly to the northerly directions generate waves which erode the western shore of Tangier. Tides have a mean range of 1.6 feet and a spring range of 1.9 feet under normal conditions; however, the combined influence of low pressure centers and persistent high winds during the period from September to April results in high tides with elevations as high as five feet.

Topography

Tangier Island is a relatively uniform environment comprised of beaches, marshes and three north-south sand ridges. The three ridges, on which most of Tangier's development has occurred, range from 1,700 feet to 6,100 feet in length and up to 1,300 feet in width.

The island is very flat. The highest elevation on Tangier is less than six feet above sea level, making slopes effectively 0 percent. The combination of low elevation and inadequate slope for drainage make Tangier susceptible to poor drainage and flooding.

Flood Hazard Areas

Because of the flat land and low elevation, most of the Town lies within the 100-year floodplain. The only areas of land lying outside of the floodplain are the airstrip, a small area along Main Ridge, and a small area along Canton Ridge. Land within the 100-year floodplain statistically averages one flood in a 100-year time period, which is a 1% chance of flooding in any given year. However, such flooding may occur as many times as conditions cause.

Surface Water

There are no freshwater streams or natural water bodies on Tangier Island. The island is surrounded by tidal waters and cut by tidal creeks and guts, and all surface water has a high saline content.

Wetlands

There are 338 acres of tidal wetlands in and around Tangier. Wetlands are critical because they filter manmade and natural pollution from surface and ground water. Wetlands also protect beaches from erosion, retain storm water and limit erosion during flooding, which is especially important for Tangier since most of the Town lies within the 100-year floodplain. Wetlands are crucial habitats for resident and migratory birds, and provide spawning ground for many kinds of aquatic life, including crabs, an important element in Tangier's economy. The tidal creeks between the ridges are vegetated by large stands of saltmarsh cordgrass, which serves as a spawning and nursery ground for fish, acts as a deterrent to shoreline erosion, and serves as a trap for sediment in upland runoff. Black needlerush is common in the marsh area between the western shore and airport, and a large meadow is found east of Canton Creek. Saltmeadow hay communities are also found at the southern end of the island. Many of the parts of this marsh have been periodically burned. Black needlerush and saltmeadow community grasses are less valuable to wildlife, marine life, and waterfowl than saltmarsh cordgrass, but saltmeadow marshes are valuable in protecting water quality and as a buffer against coastal flooding.

Erosion

Tangier's erosion rate has been fairly constant over the past 100 years. Between 1850 and 1942, the average erosion rate was 18 feet per year. The rate increased to 20 feet per year between 1942 and 1967. Between 1967 and 1978, the erosion rate varied from 14 feet to 21 feet per year, depending on the location. For planning purposes, an erosion rate of 20 feet per year is projected.

The western side of Tangier has a 5,700 foot long sea wall, built in 1990 by the Army Corps of Engineers to counteract significant erosion occurring along the western shore of the island, threatening the airport runway. The shoreline south and north of the seawall has been eroding at a higher rate relative to the total shoreline.

Erosion is now occurring along Tangier Creek at the mouth of the North Channel. As a result of the direct exposure to northwest winds, which can generate significant wave action and sheets of ice in winter. In addition, the shoreline erosion has caused increased shoaling in the channel. The erosion problem in the mouth of North Channel causes delays and inflicts damage on vessels, landing facilities and other structures. Local interests desire the construction of a breakwater to protect these navigation facilities and to restore safe boating. A Navigation study done by the Army Corps of Engineers in 1995 concluded that although a breakwater would effectively control the erosion, it was not economically feasible and no Federal action would be taken.

Soils

Tangier is composed of several different soil types. The soils along Canton Ridge and Main Ridge are mostly composed of Bojac Sandy Loam (BkA) and Munden Sandy Loam (MuA), which are a brown or grayish-brown fine sandy loam with an average depth of eight inches. When wet, this soil has a slight tendency to run together, while in dry weather, there may be some baking. The soil along West Ridge is mostly comprised of Arapahoe-Melfa Complex (AmA), a poorly drained soil. This soil has severe limitations for development mostly due to water content and is generally unsuitable for cultivation or development.

Except for small areas of Coastal Beach, the remainder of Tangier's soils are Melfa-Hobucken Complex, which characterize tidal marshes, and are a brown or gray slimy sandy loam to loam or clay loam, with the top portions interspersed with decomposing vegetable matter and roots of course grass, saturated all year and penetrated by winding tidal channels. There are also some areas of Udorthents and Udipsamments (UpD), which are mainly fill and sandy materials that are found around structures and in marshes near dredged areas.

In Tangier, all of the soils are highly permeable, and most are also hydric, with a depth to water of 0-18 inches, as shown in Figure __. Highly permeable soils are extremely susceptible to pollutant leaching and have a high potential for groundwater pollution. Hydric soils are primarily wet and poorly drained.

Arapahoe-Melfa Complex (AmA):

Nearly level, very deep, and very poorly drained soil. This soil has severe limitations mostly due to water content that make it generally unsuitable for cultivation or development. Better suited for recreational uses.

Bojac Sandy Loam (BkA):

Nearly level, very deep, and well drained. Located on broad flats, this soil is very well suited for cultivated crops. Instability limits the soil for shallow excavations.

Melfa-Hobucken Complex (McA):

Nearly level, very deep, and very poorly drained soil that is located primarily in tidal marshes. The soil is saline and subject to tidal flooding.

Munden Sandy Loam (MuA):

Nearly level, very deep, and moderately well drained soil that is found on broad flats and in depressions. This soil is well suited for cultivation, although seasonal high water table, seepage, permeability, and instability of the soil are limitations for community development.

Udorthents and Udipsamments (UpD):

Nearly level to moderately steep, very deep soils that may range from well drained to somewhat poorly drained. These soils are mainly fill and sandy materials that are found around structures and in marshes near dredged areas.

Ground Water

The Town's water supply comes from 1,000 ft. artesian wells, which draw from the Eocene aquifer. Tangier's water supply is part of a different hydrogeologic system than the rest of the Eastern Shore. The Town's water supply is affected by ground water flow from the upper Potomac aquifer on the Virginia mainland, and the quality and quantity of its water supply is

affected more by activities off the island than on the island. It is important that Tangier monitor its water carefully and urge conservation on the part of residents, since there is little local control over the supply. Although the Town's water supply is not affected by its own ground water recharge, it is still important to protect this resource because Tangier's ground water system affects the surrounding wetland areas. Pollution or disruption of this system could negatively affect the ecological diversity of the island.

Wildlife

Tangier Island supports a variety of wildlife, especially bird species. Located along the Atlantic Flyway, Tangier and its neighboring islands are attractive to migratory waterfowl, including Canada geese and tundra swans. Nonmigratory species include mallards, widgeons, black ducks and redhead ducks. The last two are of some concern to biologists. Black ducks are on the decline nationally, but remain strong in Virginia, while redhead ducks have seen their habitat areas diminish and Tangier Island is one of their last havens. The number of birds found often fluctuates because of the dynamic nature of the island. For instance, a winter storm may change the configuration of a favored beach, requiring the bird population to move for a season or until the beach reappears to their liking. Other species that have been sighted on Tangier include rails, terns, skimmers, greenback herons, egrets, and an occasional eagle or falcon.

Other animal species found on Tangier include muskrats and otters as well as horseshoe crabs and diamondback turtles, which use the island as a breeding ground. There are many kinds of marine organisms in the area, all contributing to the food web of the Chesapeake Bay. The most important commercial marine life resource to Tangier is the Atlantic blue crab, which many Tangiermen depend on for their livelihood.

Chesapeake Bay

Tangier lies within the nation's largest estuary, the Chesapeake Bay, which has provided more crabs for human consumption than any other water body on earth. Although many residents of Tangier still make a living as watermen, this way of life is threatened due to the decline of the Bay. Water pollution is the main reason for the Bay's decline, and studies have shown that nonpoint source pollution has a devastating impact on the Bay's water quality.

Nonpoint Source Pollution

Nonpoint source pollution occurs when pollutants, which accumulate on land during dry weather, are carried to streams and to the Bay in runoff produced by rainfall. It is called nonpoint because it does not enter the waterbody from a pipe or other identifiable point. Nonpoint source pollution contains sediment, heavy metals, bacteria, nutrients, pesticides, oil and so forth. The amount of runoff and nonpoint source pollution increases as the amount of impervious surface, such as pavement and buildings, increases.

Currently, there is no stormwater management on Tangier. When rainfall lands on the island, all runoff from the rain goes directly into surrounding wetlands and the Bay. This includes all pesticides and fertilizers used in yards, petroleum products accumulated on roads, and other pollutants. Besides harming the water quality of the Bay, this runoff pollution is detrimental to the organisms, fish, birds and other life that utilize the wetlands. It is especially detrimental to

Tangier because the wetlands serve as nurseries for small crabs, fish, and other marine life, which contribute to the livelihood of the residents.

Chesapeake Bay Preservation Act

In 1988, the Commonwealth of Virginia enacted the Chesapeake Bay Preservation Act (Bay Act), which provides localities with the framework to protect water quality and environmental features through land use planning techniques. The waters of the Chesapeake Bay have been degraded significantly by many sources of pollution, including nonpoint source pollution from land uses and development. The citizens of Virginia and particularly Tangier are dependent upon the economic benefits derived from the Chesapeake Bay, and the Town recognizes the importance of the Bay Act in maintaining the integrity of state waters and the Chesapeake Bay.

The objectives of the Bay Act are to protect the quality of state waters. While point source water pollution regulations are ineffective in dealing with nonpoint source pollution, local land use regulations can reduce water pollution by requiring development setbacks from shorelines, and allowing natural vegetation to prevent erosion and filter stormwater. The Bay Act requires that Chesapeake Bay Preservation Areas be delineated by the Town of Tangier and certain land use criteria be applied to these areas. Chesapeake Bay Preservation Areas are lands "which, if improperly developed, may result in substantial damage to the water quality of the Chesapeake Bay and its tributaries." Development in these preservation areas must meet general performance criteria that are designed to reduce nonpoint source pollution and protect sensitive lands from disturbance. Chesapeake Bay Preservation Areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs).

Resource Protection Areas

RPAs are lands at or near the shoreline containing components which have important value to the water quality of the Bay. RPAs include tidal shores, tidal wetlands, nontidal wetlands which are adjacent or connected by surface flow to tidal wetlands or tidal shores, and a 100-foot buffer landward of these features. Most of Tangier is an RPA because of the extensive wetlands and tidal shorelines, as depicted on the U.S. Fish and Wildlife National Wetland Inventory Map. When the 100-foot buffer is delineated adjacent to the inland border of the tidal shore and wetland area, very little of the Town remains outside of the RPA, as shown in Figure 2.

In land designated as an RPA, only water dependent uses, such as marinas and commercial fishing facilities, can be constructed. Redevelopment of existing uses are also allowed in RPAs, but new development of homes, businesses and related structures are not allowed. However, this will not impose an undue hardship for Tangier because all land suitable for development has already been built upon, and redevelopment is allowed in RPAs.

Resource Management Areas

RMAs include land adjacent to and landward of RPAs. The purpose of the RMA is to provide additional water quality protection and to minimize pollution impact to the RPAs. RMAs include land types that, if improperly developed, have the potential for causing significant water

quality degradation or for diminishing the functional value to RPAs. RMA components include floodplains, non-tidal wetlands not included in the RPA, sensitive soil types, and other lands necessary to protect water quality. All of Tangier is characterized by either floodplains or highly permeable soils. There are also some parts of the Town characterized by hydric soils with a shallow depth to water table. Based on the presence of sensitive land types, all of Tangier that is not designated as an RPA is to be designated as an RMA. The RMA is designated as the upland areas shown on the NWI Map, and includes West Ridge, Main Ridge and Canton Ridge, as shown in Figure 2.

In an RMA, any land use which is allowed under the existing zoning ordinance is permitted. Tangier currently does not have a zoning ordinance, but is in the process of developing one. All development and redevelopment activities in an RMA must meet the general performance criteria of the Bay Act, which includes preserving natural vegetation, minimizing land disturbance, minimizing impervious cover, and controlling stormwater runoff.

Intensely Developed Areas

The regulations provide for localities to designate portions of CBPAs as Intensely Developed Areas (IDAs). The IDA is an overlay to the underlying RPA/RMA designation. IDAs are to be designated in areas where development is currently concentrated and where little of the natural environment remains. Generally, IDAs are industrial, heavy commercial or institutional areas, largely devoid of natural vegetation. An IDA is a redevelopment area and the IDA may be exempt from the buffer requirements, although any redevelopment activities would have to comply with Stormwater Management and Erosion and Sediment Control requirements.

The Town has elected to designate an IDA along the existing dock/harbor area along Main Street and Rt. 1307. The IDA is shown in Figure 2.

LAND USE

Because most of Tangier Island is low marshland, only about a half square mile of the island is habitable and residents have been forced to make maximum use of available land. Virtually all development has occurred on the three sand ridges on the island, which are separated by marsh and tidal creeks, and connected by narrow wooden bridges. These ridges are known as Main Ridge, West Ridge and Canton Ridge. Canton Ridge is the shortest and eastern-most ridge, and is completely residential. Main Ridge, as the name implies, is the longest and most heavily developed ridge. Its land uses include residential, commercial and industrial. West Ridge is primarily residential, but several other types of uses are located at the northern end.

Zoning Ordinance

The zoning ordinance is the legal mechanism by which the goals and objectives of the comprehensive plan are implemented. Through zoning, land is divided into districts according to existing or desired land uses. The general purpose of a zoning ordinance is the protection of the health, safety and general welfare of the community. All zoning ordinances are made up of two components: text and the official zoning map. The zoning text describes the regulations, standards and procedures, and the map defines the location of zoning districts on the land.

The Town of Tangier currently has no zoning ordinance or zoning map, both of which are required by the Chesapeake Bay Preservation Act and Regulations. The Tangier Town Plan will be the basis for creation of the zoning ordinance.

Residential

Tangier contains 277 housing units, which are located along the three ridges. Canton Ridge is completely residential with (22) conventional residential structures and six mobile homes. Main Ridge contains 169 conventional residential structures, 22 mobile homes, and West Ridge contains _____. Residential areas are characterized by small lots. In places, mobile homes have been placed beside existing conventional dwellings due to the shortage of developable land. Not all dwellings front a public street or walkway. Those which do not are reached by private sidewalks.

Tangier has a unique residential character. Most of the houses in the town are white-frame houses of a late Victorian style. Although some homes are surrounded by white picket fences, a substantial number have chain link fences which detract from the appearance and character of the Town.

There are no vacant lots left which are suitable for development; however, it is possible that some existing structures will be demolished in the future and new homes will be built in their place. Since there is no current zoning ordinance, there are no controls or restrictions to ensure that potential new homes will complement the existing structures in character and architectural style. It is important to protect the residential character and aesthetics of Tangier from inappropriate redevelopment.

Housing Characteristics

In 1990, Tangier had an occupancy rate of 91%, as shown in Table 4. Of the 9% that are vacant, at least four are dilapidated and boarded up. Of these structures, some appear to be unsafe and not possible to rehabilitate. Of Tangier's occupied housing units, 92% are owner occupied and 8% are renter occupied. Tangier's owner occupancy rate of 92% is substantially higher than that of the County (75%) and the state (60%).

As shown in Table 4, 92% of the population in Tangier lives in a family household, which is a household where two or more persons living together are related by birth, marriage or adoption. Of the residents aged 65 and over, fully one third live alone, and most are women. A number of single person fixed-income households have been unable to maintain their houses and have requested help from agencies that provide housing assistance.

The two indicators most often used to define housing deficiencies are overcrowding and lack of plumbing facilities. Census figures indicate that 14 units are considered substandard due to a lack of complete plumbing facilities. Overcrowding is not a significant factor in Tangier. Less than one percent of the owner-occupied units are considered overcrowded, and no rental units have crowded conditions, which are defined as more than one person per room. A walking tour of Tangier reveals numerous occupied houses which have been allowed to deteriorate to various stages of disrepair. Several houses are abandoned and uninhabitable, posing a safety risk.

Commercial

Commercial land uses are mostly concentrated on Main Ridge, near the harbor area, adjacent to the North Channel. The shore adjacent to the channel is developed with boat repair facilities, crab processing houses, marinas, fuel facilities, docks, retail businesses and bait and ice houses. Approximately 25 businesses are located in this area, including a relatively large boatyard with drydock and marine railway facilities. West Ridge is primarily residential, but its northern end contains several other types of uses including the airport, a neighborhood center, a crab packing plant and a boat yard.

Because of the growth of tourism in Tangier, it is possible that more businesses could appear in Town. Currently there are no height restrictions or restrictions on architectural style. That is why it is important to enact land use and zoning ordinances to keep future development compatible with existing structures.

Retail businesses include six restaurants, six gift shops, one bed and breakfast, and two grocery stores. Also located along Main Ridge are the Town Office, post office,...

Tourism is growing in Tangier, and as a result, many residential houses are developing into businesses, such as craft and souvenir shops. This has lead to an increase of signs throughout the island. There is concern that many of the signs are distracting, and detract from the Town's character and visual appeal. Currently there are no ordinances or restrictions regulating the use of signs. This could develop into a greater problem in the future, as tourism grows and the potential for more retail business increases.

Table 4
Housing Data
1990

	Number	Percent
Total Units	277	100%
Total Occupied Units	253	91%
Total Vacant Units	24	9%
Total Occupied Units:	253	100%
Owner Occ. Units	233	92%
Renter Occ. Units	20	8%
<u>Persons in:</u>		
Family Households	605	92%
Nonfamily Households	54	8%
Family Households of Residents Aged 65+	62	66%
Nonfamily Households of Residents Age 65+	32	34%
Male Living Alone	6	
Female Living Alone	25	

Source: 1990 Census of Population and Housing, Summary Tape Files 1 & 3

COMMUNITY FACILITIES

Community facilities are the structures and services provided by government and include schools, water and sewer, waste disposal, public safety, recreational facilities and some medical services.

Water Supply

The Town provides public water and sewage treatment to residents. The water comes from 1,000 ft. artesian wells and is stored in a water tower. The water tank has a capacity of 150,000 gallons and water usage is not metered. It is expected that the water tower will need maintenance in the near future. The Town has qualified for a 0% loan from the Virginia Resources Authority and has submitted a \$799,000 grant application for the necessary upgrades.

Wastewater Treatment

The sewage treatment plant serves all the homes and businesses in Tangier. The plant, which is the biggest budget item in the Town, has been damaged by storms, rust and corrosion due to its proximity to salt water, and is currently in need of about \$800,000 worth of upgrading to meet state requirements.

Solid Waste

The disposal of solid waste on Tangier Island is a problem. There is a town dump and it is not at a landfill nor is the land suitable for a landfill because of the high water table. Trash is collected twice a week for residential homes and daily for businesses. The Town operates a waste incinerator for the disposal of most trash. Larger items that cannot be burned in the incinerator, such as appliances, along with ash from the incinerator, are disposed of at the town dump, which is located in the northwest side of the island and covers about 2.5 acres. The dump is now at full capacity and must be replaced by a suitable alternative. This dump has been used by Tangier residents for hundreds of years, and is located just yards away from the Chesapeake Bay. Pollutants from the dump site are a big concern, because they leach straight into the Bay whenever it rains. Currently there are no recycling programs on Tangier, although there is a program in Accomack County.

Tangier is working with the Virginia Department of Environmental Quality and Accomack County to clean the dump site by hauling the trash away on barges. According to the Virginia Resources Authority, the Town will not receive any funding for this cleanup until it completes improvements to the wastewater treatment facility, at a cost of about \$800,000.

Transportation

The primary mode of transportation between Tangier and the mainland is water transport. Most people on the island own boats or have access to them. Since the harbor at Crisfield, Maryland is more accessible than any in Accomack County, and because mail bound for Tangier is routed through Crisfield, the Tangier-Crisfield route is more heavily travelled than any other. Island residents travel to Crisfield on the mail boat or in personal boats for shopping, business, and entertainment purposes. Supplies for the grocery stores are brought to the island by boat, and large items such as mobile homes and building supplies are brought in by barge.

Water access to Tangier is gained via the Tangier North Channel which extends from the western shore of the island to the eastern shore, between West Point and East Point Marsh, and out into Tangier Sound. Incoming boat traffic uses this channel into Mailboat Harbor to the docks and piers at the Town of Tangier. Channel maintenance is a continuing problem as drifting sand fills the channel at a relatively rapid pace. At times, large boats and barges are unable to use the channel.

A second means of transportation to Tangier is by air. An airstrip owned by the Virginia Airports Authority is located on the west side of the island. This airport is a critical aspect of Tangier's transportation system. When ice covers the Bay, it is the island's only link to the mainland. Most business visitors travel by air, and many deliveries are received on the island by airplane. The airport has no landing lights, and the runway surface is in need of repair. Virginia Delegate Robert Bloxom has been working with the Town to obtain funding for the work that needs to be done.

Transportation on the island is by foot, bicycle, golf cart or motorcycle. There is little need for cars and trucks on the island, and residents who own vehicles generally garage them in Crisfield, Maryland, although there are a few mini-size cars and trucks in Town. There are a few cars and trucks, but the street system is not conducive to frequent automobile travel. In general, the streets are very narrow and poorly surfaced. The Town has eight bridges. Two have been widened and four more need work. The bridges are rated for only two tons, and the Town's fire trucks and Methodist Church bus exceed that weight limit.

Tangier has approximately three miles of narrow roadway. The hard-surfaced roads are maintained by the State of Virginia, although the state is now requiring 10 feet of clearance in order to maintain them. Most of Tangier's streets are eight feet wide and only Main Street has the required clearance. The Town is attempting to work out an agreement with the Virginia Department of Transportation.

Public Safety

Fire protection for the Town is provided by the Tangier Volunteer Fire Department. The fire alarm is activated by the 911 center on the Eastern Shore. Equipment includes one mini-pumper, one S-10 pick-up truck, and a Jeep with a pump. The fire company also provides ambulance service and has one van-type ambulance, which is unable to reach the lower end of Canton Ridge. In the last year the fire company responded to approximately 54 ambulance calls and eight fires. The State of Maryland provides emergency air lift services by helicopter.

The Town employs one full-time police officer who is on call 24 hours a day. Tangier also has an agreement with the Virginia Marine Resources Commission (VMRC) whereby the two VMRC officers that live on Tangier can provide back-up or respond when the permanent officer is away.

Schools

The Tangier Combined School is part of the Accomack County school system and houses students from grades K-12. The school building, built in 1932, is old and seriously

overcrowded. Some of the floors are sinking, and many of the windows cannot be raised or will not stay up. Four classrooms have no windows, which creates a fire safety hazard. The Accomack County School Board is considering a proposal which includes a new school in Tangier for grades k-12.

To acquire post-secondary education, Tangier residents leave the island. The Eastern Shore Community College is available to students as well as other Virginia and non-state schools of higher education. The number of students continuing their education is not high but compares favorably with the Accomack County schools. The economic character of Tangier, a dependency on crabbing and shell fishing which can be quite profitable at times, provides a long-standing alternative to education.

Recreation

The Town of Tangier acquired funds from the Department of Housing and Urban Development in 1976 to build a neighborhood facility. The facility provides an area for recreation (basketball court), two conference rooms, and a kitchen. Accomack County assists in the operation of the recreational center on the island. The facility employs a manager, and is well-used, particularly in the colder months. During the past year the County sent games and equipment to the center.

Other than the neighborhood facility, there are few areas available for active recreation. The school playground has some equipment and a ballfield, but the ground is often too wet to allow for frequent use. The limited amount of dry land suitable for active recreation is used for housing.

A narrow sand beach is located on the southwestern side of the island, and is used by residents for recreational purposes; however, this beach not have picnic facilities, or adequate access. The County maintains a public dock area in Town, although the fees do not generate sufficient revenue for adequate maintenance.

Medical Services

Tangier has a health clinic staffed by a doctor on Tuesdays and Thursdays. Transportation costs for the doctor are partially funded through Accomack County taxes and emergency 911 funds. Two registered nurses are residents of the Town. A dentist visits the Town monthly, and an optometrist visits six times each year. There is no regular veterinary service.

ECONOMY

On Tangier, the commercial seafood harvesting industry has long provided the economic base for the island community. Fishing grounds in the vicinity of the island produce excellent catches of crabs, which can be processed on the island. Income is also provided by tourism. Most of the visitors to the island are attracted by good seafood and by the unique historical characteristics of the community. Because of its isolation through the years, Tangier has retained much of the quaint appearance and dialect of colonial days.

Much of the economic activity of the community is concentrated in the harbor area, adjacent to the North Channel. This area is developed with boat repair facilities, crab processing houses, marinas, fuel facilities, docks, retail businesses and bait and ice houses. There are about 25 businesses located adjacent to the channel, including a relatively large boatyard with drydock and marine railway facilities. Approximately 125 commercial boats are berthed at the docks along the channel. These boats are engaged in harvesting seafood and transporting groceries, building supplies, passengers, fuel and other miscellaneous cargo.

Seafood Industry

Table 5 indicates that approximately 25% of those working are engaged in the category of agriculture, forestry, fisheries, and mining; for Tangier this means the seafood industry. While the Town used to depend almost totally upon the harvesting of crabs, fish and oysters from the Bay, that is now changing due to the decline of the Bay water quality and fisheries. As shown in TABLE 5, about a quarter of the island's residents make their living as watermen. The fisheries industry is based on the Atlantic blue crab, although some oystering and finfishing also occur. From April to November, hard crabs are harvested in crab pots placed in local waters. Most of the catch is marketed in Crisfield, Maryland.

Moneywise, the soft crab fishery is the most valuable. Tangier is sometimes referred to as the "soft shell crab capital of the world." Peeler crabs are caught in traps, scrapes, pots and dip nets, held in floats until they shed, and sold as soft crabs. Approximately 15 small crab houses are located along North Channel, which process soft-shell crabs. The typical soft-shell crab processing business in Tangier processes crabs with an annual dockside value from \$12,000 to \$15,000.

From December through March, the Tangier watermen either enter the dredge crab industry in Hampton or Cape Charles, or tong oysters. Although the decline of the Bay's health is now levelling out in part due to the Chesapeake Bay Preservation Act resulting in better water quality, the future of the Bay is uncertain. Overharvesting is a concern, and so are economic opportunities in the seafood industry.

The recreational fishery is small, most of it taking place in the fall. The absence of easy access to Tangier and the lack of awareness on the part of sports fishermen of the fishing opportunities on Tangier contribute to the slack recreational fishery

Erosion is occurring at the mouth of the North Channel, which results in structural damage to docks, wharves, piers and crab shedding pens. In addition to structural damages, waves and strong currents wash silt into the water filtration systems of the crab houses, which can kill the crabs being processed. An Army Corps of Engineers Navigation Study reported that construction of a 430 foot long breakwater at the mouth of the channel would enable businesses located on the channel to operate more efficiently by reducing time and money spent on repairs from wave action and ice. Expenditures for dredging would also be reduced since shoaling rates would decline. The cost of this breakwater is estimated at 1.2 million dollars, while the annual average benefits it would save the island are \$53,000. Based on these numbers, the Army Corps of Engineers concluded that the proposed breakwater is not economically feasible and recommended that no further Federal action be taken at this time.

Tourism

Tourism is a visible industry in Tangier. Tourists travel to the island by passenger ferry boats from Onancock and Reedville, Virginia and by way of the mail boat from Crisfield, Maryland. Visitors also arrive in private boats which they dock at the marina. Most tourists visit the island for day trips during the warmer months. There are no public restroom facilities for visitors, who currently use the Chesapeake House Bed and Breakfast's restroom facilities. For the most part, these visits are short-term, no longer than a portion of the day. There are limited overnight lodging and meals at one well-known establishment. Some rooms are available in private homes, and there are a few small stores and eating places. Retail businesses in Tangier include six gift shops, six restaurants (four of which are seasonal) and one Bed and Breakfast for overnight accommodation. Two grocery stores serve the immediate needs of residents. Retail trade (21%) and professional services (23%) are the other major employment categories represented. These service industries are supported by Tangier's seafood and tourism industries.

TABLE 5
Employment by Industry
1990

	<u>ACCOMACK COUNTY</u>		<u>TANGIER</u>	
	Number	%	Number	%
Agriculture, Forestry, Fisheries, Mining	1,278	9.3	63	24.5
Construction	1,065	7.8	15	5.8
Manufacturing	2,573	18.8	6	2.3
Transportation	448	3.3	27	10.5
Communications, Other				
Public Utilities	256	1.9	3	1.2
Wholesale Trade	799	5.8	8	3.1
Retail Trade	2,562	18.7	54	21.0
Finance, Insurance, Real Estate	364	2.7	0	0.0
Business and Repair Services	558	4.1	18	7.0
Personal, Entertainment, & Recreation Services	595	4.3	3	1.2
Professional Services	2,403	17.5	60	23.3
Public Administration	<u>789</u>	<u>5.8</u>	<u>0</u>	<u>0.0</u>
Totals:	13,690	100	257	100

Source: U.S. Census of Population and Housing, 1990, Summary Tape File 3A.

Income

In 1990, there were 429 persons in Tangier between the ages of 16-65. Of these working age persons, 257 were employed, which is 60% of the working age population. Table 6 indicates that Tangier's median household income of \$19,861 in 1989 was about three percent less than the Accomack County median household income of \$20,431. 40% of households in Tangier had incomes below \$15,000 in 1989, compared to 37% of households in Accomack County as a whole.

TABLE 6
Household Income in 1989

	<u>Accomack Co.</u>	<u>%</u>	<u>Tangier</u>	<u>%</u>
Less than \$5,000	1,355	10.7	44	16.7
\$5,000 - \$9,999	1,582	12.5	39	14.8
\$10,000 - \$14,999	1,697	13.4	23	8.7
\$15,000 - \$24,999	2,958	23.4	52	19.8
\$25,000 - \$34,999	2,226	17.6	40	15.2
\$35,000 - \$49,999	1,596	12.6	34	12.9
\$50,000 or more	<u>1,232</u>	<u>9.7</u>	<u>31</u>	<u>11.8</u>
Totals:	12,646	100.0	263	100.0
<hr/>				
Median House- hold Income:	\$20,431		\$19,861	

Source: U.S. Census of Population and Housing, 1990, Summary Tape File 3A.

An analysis of an area's economy usually attempts to distinguish between basic sector and supporting sector activities. The basic sector of an economy includes those activities which export goods or services from the area and bring income into the area. The supporting sector includes activities which recirculate money within the area through sale of goods or services for local use. Such an analysis is rendered extremely difficult by Tangier's location and unique circumstances, however.

Seafood harvesting and processing activities and tourist-related businesses would normally be considered basic sector activities since they bring money into Tangier from outside. The bulk of such income results from sale of seafood catches in Crisfield, Maryland. However, because there are few local businesses available to recirculate this income on Tangier, most of it is soon returned to the Crisfield economy through purchase of groceries, clothing, medical services, and

other personal goods and services. Even commodities sold through small businesses on Tangier (such as groceries and heating oil) are purchased wholesale in Crisfield. Some Tangier income is spent in Accomack County for personal goods, services, and payment of county taxes, but the amount is believed to be small relative to that spent in Crisfield. A portion of Tangier's income is also spent in Salisbury, Maryland. The following general conclusions may be drawn from the preceding discussion:

1. For the most part, Tangier must be considered as a segment of the Crisfield supporting economy.
2. Tangier may also be considered as a minor segment of the Accomack County economy. Income which is received from sale of seafood or from tourists and which is spent in Accomack County contributes to Accomack County's basic economy, while Accomack County government expenditures made on Tangier and returned to Accomack County represent supporting sector activities.
3. Government expenditures (teachers salaries, food stamp payments, etc.) contribute primarily to the Crisfield economy.
4. Recirculation of income, the multiplier effect, an important indicator of economic vitality and a means of generating wealth in a community, is minimal on Tangier itself.
5. Tangier, in reality, has little in the way of an economy of its own. It serves primarily to exchange income between other economies or to recirculate money within the Crisfield economy.

The fact that Tangier is an island presents unique challenges to sustaining a viable economy for the residents. The Town is 40 minutes away from Crisfield, Maryland and one hour from Onancock, Virginia by boat. Tangier currently has stronger economic ties with Maryland than with Virginia. Mail comes on the Crisfield boat from Maryland, and merchants there seem more receptive than the closest Virginia merchants to dealing with Tangier residents. The Town has been very successful in working out partnerships with other localities to obtain necessary services; however, the declining seafood industry may make it increasingly difficult to maintain the unique way of life Tangier residents cherish unless strategies are developed for expanding economic opportunities.

III. GOALS AND OBJECTIVES

The purpose of this section is to state the goals and objectives of the Tangier Town Plan. Goals and objectives are general policy statements which define planning ideas and concepts concerning future growth and development in Tangier. Goals provide statements of the general long range direction for future growth and development. Objectives provide specific policies and principles necessary to achieve the stated goals. These goals and objectives are based on the observations and analysis of the existing conditions in Tangier, as reported in the previous section.

I. WATER QUALITY PROTECTION

GOAL: Protect the groundwater and surface water resources of the Commonwealth from an increase in pollution.

Objective: Ensure adequate implementation and enforcement of the Chesapeake Bay Preservation Act.

Action: Educate and inform the development community and the town about water quality protection and specific program requirements of the Town's Bay Act program.

Action: Develop administrative procedures in cooperation with Accomack County to expand the Town's role in review, administration and enforcement of the Town's Chesapeake Bay Preservation Act program.

Objective: Correct existing erosion problems and prevent erosion problems from occurring in the future.

Action: Investigate state and federal funding sources for stabilizing the shoreline along the northern portion of Tangier.

Action: Evaluate the need for a development review process to ensure the control of erosion and sedimentation during site development.

Objective: Improve the Town's ability to manage stormwater runoff.

Action: Enlist the assistance of Accomack County and the Chesapeake Bay Local Assistance Department in the review of stormwater management plans for development projects.

Objective: *Protect the quality and quantity of the Town's potable water supply.*

Action: Promote water conservation through education of the Town's citizenry and amendments to the Building Code to require water conservation fixtures for new development.

GOAL: **Restore the quality of state waters to a condition that will require all reasonable public uses and will support the propagation of aquatic life.**

Objective: *Achieve a reduction in existing pollution sources.*

Action: Work with the Department of Environmental Quality (DEQ) to educate the owners of above ground storage tanks on the proper maintenance and care of these tanks to prevent accidental spills.

Action: Explore opportunities for water quality improvement as areas within the Town redevelop.

Action: Work with DEQ to clean up the town dump.

Action: Continue to investigate alternatives to control and remove town refuse in a timely and environmentally sound manner.

Action: Continue to work with DEQ and investigate funding sources to upgrade the Town's wastewater treatment plant.

Action: Explore opportunities to reestablish the buffer area as along the Town dock area over time as the area undergoes redevelopment.

Action: Coordinate with Accomack County to establish a recycling program on Tangier.

II. LAND USE AND DEVELOPMENT

GOAL: Achieve a pattern of land use which balances water quality and environmental protection with social and economic goals.

Objective: Prohibit development in environmentally sensitive areas so that important environmental resources within the Town are protected.

Action: Enforce the provisions of the Town's Floodplain Overlay District and restrict development within floodplains associated with the Chesapeake Bay.

Action: Require the preparation and careful review of an environmental site assessment to ensure the accurate delineation of environmental resources prior to design of a site.

Action: Ensure that required buffer areas are protected during the construction process by carefully flagging and inspecting these areas before any land disturbance occurs.

Objective: Focus redevelopment and development activities in areas most suitable so that environmentally sensitive areas are protected and public and private costs associated with development are minimized.

Action: Develop a Zoning Ordinance to establish appropriate classification that will implement the Plan's future land use recommendations.

Action: Identify areas where development should be limited due to physical constraints.

Action: Develop and implement a development review process in the Town that requires an adequate assessment of a site's physical constraints prior to the approval of any land disturbance.

Action: Continue to improve the mapping of environmentally sensitive areas and other physical characteristics for all lands within the Town.

Objective: Protect the character of the Town by conserving the Town's natural and fiscal resources and supporting infill and concentrated development and redevelopment.

Action: Promote a compact and vibrant commercial area with compatible uses through the development and implementation of a zoning ordinance.

Objective: Protect and enhance the visual aesthetics of the Town.

Action: Regulate sign use and appearance.

Action: Eliminate unattractive signs and visual clutter through the use of a service directory.

Action: Promote the use of picket fencing and discourage the use of chain link fencing.

Objective: Preserve existing open space resources within the Town for the long term enjoyment of scenic and environmentally sensitive areas.

Action: Identify opportunities for open space and recreation within the Town.

Action: Improve the beach area and provide adequate facilities and access.

III. HOUSING

GOAL: To provide safe and adequate housing for the future and present residents of Tangier.

Objective: Preserve and protect the existing housing stock in the Town.

Action: Encourage maintenance of all housing structures.

Action: Encourage rehabilitation of substandard housing through continued rehabilitation assistance for lower income residents.

Action: Continue demolition of abandoned and other irreparable structures to prevent blight and health hazards.

Action: Continue to work with Accomack County and the Accomack Northampton Housing Authority to identify Community Block Grant projects.

Action: Encourage the use of housing assistance for qualified residents of the Town.

IV. SOCIAL AND COMMUNITY FACILITY CONCERNS

GOAL: Provide adequate social services community facilities and ensure citizen participation for all Town residents.

Objective: Ensure the needs of Town residents are met.

Action: Identify specific needs through cooperation with area-wide social service agencies.

Objective: Ensure provision of adequate community facilities for the Town.

Action: Provide expanded recreational facilities such as the beach area.

Action: Work Accomack County to improve school facilities.

Action: Continue to work to maintain and expand other community facilities.

V. ECONOMY

GOAL: To maintain economic vitality and improve the financial condition of the community.

Objective: Improve the economic opportunities for the residents of Tangier.

Action: Encourage the participation of the Town Council and local residents in the development of an economic strategy.

Action: Investigate state, federal, and other funding sources for the development of a visitor center and public restroom facilities on Tangier.

Action: Implement downtown improvement programs such as building maintenance and repair, general cleanup, joint advertising efforts, provision of adequate parking and sign and facade improvements.

Action: Investigate methods to promote tourism in the Town such as working the state Tourism Department, Countryside Stewardship Exchange and the National Trust for Historic Preservation.

Action: Work to preserve the water related industries in Tangier through education and product promotion.

Objective: Improve the fiscal health of the Town.

Action: Evaluate the fiscal capacity of the Town to develop additional revenue sources for future service demands.

Action: Investigate possible funding sources for rehabilitation of commercial and residential buildings.

IV. PLAN RECOMMENDATIONS

Town citizens should bear in mind that even the most realistic or conservative plans may not be fully implemented as intended, for any number of reasons. Therefore, the recommendations outlined in this plan should be viewed as targets, not as firm commitments or mandates. If desired results are not achieved, an evaluation should be conducted to determine the reasons so the Town can decide whether to continue to pursue the original objective or to modify it. The Tangier Town Plan should be updated and amended every five years.

NATURAL RESOURCES PLAN

In 1988, the Commonwealth of Virginia enacted the Chesapeake Bay Preservation Act (Bay Act), which provides localities with the framework to protect water quality and environmental features through land use planning techniques. The citizens of Virginia and particularly Tangier are dependent upon the economic benefits derived from the Chesapeake Bay, and the Town recognizes the importance of the Act, and therefore, a large component of the Natural Resources Plan will be focused on the Bay Act. The objective of the Bay Act is to reduce nonpoint source water pollution.

Chesapeake Bay Preservation Program

Tangier should implement a Chesapeake Bay Preservation Area District as part of their zoning ordinance. This ordinance would establish the Resource Protection Areas and Resource Management Areas, delineated on Figure 2, which together form the Town's Chesapeake Bay Preservation Area District, covering the entire Town. In the Resource Protection Areas (RPAs), redevelopment of existing land structures is allowed, but new development would be restricted to water dependent uses, such as marinas or fishing facilities. Resource Management Areas (RMAs) would allow redevelopment or new development activities, provided they meet general performance criteria of the Bay Act. These criteria are discussed below.

Best Management Practices

Best Management Practices (BMPs) are defined in the Regulations as "practices determined by a state or planning agency to be the most effective, practical means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals." There are several types of BMPs available which are efficient and inexpensive. BMPs can be structures such as wet ponds or infiltration trenches or they can be non-structures such as vegetated filter strips. In the Town of Tangier it will be difficult to install BMPs because of the high water table, flooding and lack of open space.

Preservation of Existing Vegetation

It is very important to preserve indigenous vegetation on a site because the natural vegetation prevents erosion, filters runoff, and allows stormwater to soak into the ground. Existing vegetation is economical because it requires little or no maintenance.

Impervious Cover

Another way to limit nonpoint source pollution is to minimize the use of impervious cover, which includes surface areas such as rooftops and parking lots, where water cannot sink into the ground. Use of grass drainage ditches instead of curb and gutter, efficient layout of parking areas, minimizing the size of driveways, requiring pervious paving, such as gravel or oyster shells instead of concrete, for low volume traffic areas, and minimizing site coverage by using multi-story structures where permitted all can be effective design techniques for redevelopment on Tangier.

Stormwater Management

Managing stormwater runoff is an important way to reduce nonpoint source pollution. Because there is scarce open space on Tangier for new development, stormwater management will be concentrated on redevelopment activities. Redevelopment of any site must achieve at least a 10% reduction on nonpoint source pollution in runoff compared to the existing runoff load from the site. Any redevelopment of an existing site should increase the amount of indigenous vegetation to meet this reduction.

Intensely Developed Areas

The Bay Act allows the Town to designate portions of the preservation areas as Intensely Developed Areas (IDAs) if they meet certain criteria. In Tangier, the area along the docks, shown in Figure 2, should be designated as an IDA. The benefit of an IDA is that it may be exempt from establishing or maintaining the full 100 ft. buffer area.

Erosion

There is an erosion problem along the north part of the island. In February, the Army Corp of Engineers reported that a 430 ft. long breakwater would effectively deal with this, at a cost of 1.2 million dollars, but concluded it was not economically feasible and recommended that no further Federal action be taken at this time. The only remaining option for the Town to fund construction of the breakwater would be by congressional action, which has happened in the past. In 1989, Congress passed the Water Resources Development Act Bill, which allowed for the construction of the jetty on the western side of the island.

LAND USE AND DEVELOPMENT PLAN

The future land use map, shown in Figure 6, is a generalized map to guide the physical development and redevelopment of the Town in the long term. Practically all land on the island that has development potential has already been built upon. Given that any future development taking place in Tangier will primarily be redevelopment, along with the desire of the Town to retain its current character, the future land use map proposes no major changes from the current land use map. Future land use categories consist of residential and commercial land uses. Residential land use is the predominant land use category in Tangier. These areas are located along West Ridge, Main Ridge and Canton Ridge. The commercial land use area encompasses the harbor area near the docks. New businesses will be encouraged to locate in the commercial area rather than in residential areas. By designating this area as a commercial land use area, the existing businesses and water related industries can be protected.

Zoning

In order to ensure that future development is guided by the Town Plan, a zoning ordinance for Tangier must be prepared. A Zoning ordinance contains regulatory measures used to carry out the Town Plan, and the Town's zoning map should reflect the future land use map. A major function of zoning is to regulate and provide minimum standards for development, by controlling types of land uses that exist. By creating zoning categories and districts, residential areas can be protected from undesirable land uses. Proper zoning can ensure that compatible land uses exist in close proximity to each other. Land use regulations would be created in the zoning ordinance to protect residential areas from undesirable land uses.

One of the functions of zoning is to regulate the location of a building on a piece of property. For instance, an ordinance may establish rules of how far a building should be set back from a street or property line. Regulating the setbacks of a building on a piece of property is one way of ensuring that any new structures and redevelopment would be consistent and compatible with the existing structures in the vicinity and would not detract from the existing character of the area. Height restriction limitations are also an important tool to prevent future development from detracting from the residential character of Tangier.

Signs

Another issue of concern is the widespread use of signs throughout the island. Currently there are no means to control the use and appearance of signs. Regulations should be enacted which will ensure that the size, style and design of all signs on Tangier are compatible with the character of the town and do not distract from the visual appearance of the Town. There is also concern about the increasing number of signs on Tangier. One way to prevent unnecessary visual clutter from signs is to create a service directory.

Fencing

Another factor which detracts from the Town's appearance is the abundance of chain link fencing. The use of chain link fencing should be discouraged, and picket fencing should be promoted.

HOUSING PLAN

The majority of residential housing stock in Tangier is in good condition. In order to develop a comprehensive housing plan for improving the housing stock and preserving affordable housing opportunities, Tangier should conduct a housing survey and then apply for a Virginia Department of Housing and Community Development (DHCD) Planning Grant. The Planning Grant would be used to develop a plan to improve the existing housing stock, followed by a VDHCD Block Grant application to implement the recommendations of the Housing Plan.

One problem that was noted during the land use survey was the presence of unsightly properties. These structures pose a danger to the general health, safety and welfare of the town residents. Liens and condemnations provide a means of improving or demolishing the buildings.

COMMUNITY FACILITIES PLAN

The goals and objectives of this section include improving the existing town infrastructure and expanding recreational opportunities. This can be done through carrying out the following recommendations.

Water Supply

The water tank is expected to need maintenance in the near future and the Town has submitted a grant application for a 0% loan from the Virginia Resources Authority at for \$799,000.

Wastewater Treatment

The wastewater treatment plant, which serves all the homes and businesses in Tangier, needs upgrading because it has been damaged by storms, rust and corrosion. This is the biggest budget item in the town, and the cost of upgrading to meet state requirements is estimated at \$800,000. It is important that the plant is upgraded, because funding for the town dump cleanup is not available until the wastewater treatment plant has been updated.

Solid Waste

The disposal of solid waste on Tangier is a problem, because the town dump is filled to capacity, and is not located on land suitable for a landfill because of the high water table. Trash from the town dump should be hauled away by barge to an appropriate landfill. In the future, all solid waste items that cannot be burned in the incinerator, such as appliances, should be hauled away periodically, along with the ash from the incinerator. A recycling program should also be set up on the island.

Recreation

Recreation facilities on Tangier are limited because the amount of dry land suitable for active recreation is used for housing. A narrow sand beach located on the southwestern side of the island is used by residents, but does not have adequate access. This beach should be improved to provide for more recreational use by Town residents. The addition of picnic facilities and more adequate access would enhance the use of this beach.

Schools

In the Inventory and Analysis section, it is noted that the Tangier combined School, which is administered by the Accomack County school system is old, in need of repairs, and seriously overcrowded. The Accomack County School Board is currently considering a proposal which includes a new school in Tangier for grades K-12.

ECONOMIC PLAN

Improving economic opportunities is an important goal for the Town. The first step in improving economic opportunities is to develop resident participation in economic development activities. Residents should be encouraged to attend town council meetings and express their ideas and concerns. This is the foundation for developing a plan to expand commercial opportunities.

Tourism

Because tourism represents almost half of the Town's retail and professional services, it is important to protect and enhance this commodity. Tangier has no visitor's center or public restroom facility. Construction of these facilities are important for developing tourism on Tangier, to benefit the citizens as a whole as well as individual businesses.

Seafood Industry

The seafood industry is an important economic commodity in Tangier. Because of the scarcity of land in Town, it is important to protect commercial water related land uses. The "downtown" area near the docks is delineated as a commercial area on the future land use map. This delineation will help to protect these industries, serving as a guide for the zoning ordinance and map.



V. IMPLEMENTATION

Implementation of the plan recommendations can be accomplished by several different methods.

Chesapeake Bay Preservation Program

The most important element in the Bay Act Program is the creation of a zoning ordinance, to establish the Chesapeake Bay Preservation Area Overlay zones.

Zoning Ordinance

A zoning ordinance needs to be created for the Town, to implement Bay Act. This ordinance should be prepared by the planning commission, approved by the town council, and completed by the end of 1996. The ordinance will use the Future Land Use Map as a basis for the zoning map. The zoning ordinance will also serve to protect the character of the Town by regulating land uses and providing minimum standards for development.

Solid Waste

In order for the Virginia Resources Authority to provide the Town funding for cleaning up the town dump site, the town must make improvements to the wastewater treatment facility. Then funding can be used by the town to hire a contractor to haul away the trash on a regular basis. A recycling program should also be implemented and administered through Accomack County.

Capital Improvements Program

A Capital Improvements Program (CIP), which is a five-year plan that identifies major projects needed by the Town, should be prepared in order to accomplish projects mentioned in the Plan section of this document. A CIP identifies these projects, estimates their costs, ranks them, and determines the best method of paying for them within the community's fiscal capabilities. A capital budget is developed which is approximately five years in scope. This budget lists the projects, their estimated cost, and sources of funding.

The top priority item in the CIP should be the upgrading of the wastewater treatment facility, which is in need of about \$800,000 worth of upgrading to meet the state requirements. This should be a top priority because the Town can not receive state funding to clean up the town dump until the wastewater treatment facility meets state requirements. Other projects identified in the Plan section, which should be included in the Capital Improvements Program include the construction of a visitor center, public restroom facilities and a sign directory. The CIP should also include the replacement of chain link fencing by picket fencing.